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## NOTICE OF ALLOWANCE AND FEE(S) DUE

29683 7590 05/13/2008

HARRINGTON & SMITH, PC  
4 RESEARCH DRIVE  
SHELTON, CT 06484-6212

EXAMINER

RAMPURIA, SHARAD K

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 05/13/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/658,731

09/11/2000

Petri Jolma

854.0022.U1(US)

4528

TITLE OF INVENTION: SYSTEM AND METHOD FOR SLOT ALLOCATION WITH REDUCED NEED FOR MEASUREMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$0	\$0	\$1440	08/13/2008

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
or Fax (571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

29683 7590 05/13/2008

**HARRINGTON & SMITH, PC**  
4 RESEARCH DRIVE  
SHELTON, CT 06484-6212

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/658,731 09/11/2000 Petri Jolma 854.0022.U1(US) 4528

TITLE OF INVENTION: SYSTEM AND METHOD FOR SLOT ALLOCATION WITH REDUCED NEED FOR MEASUREMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional NO \$1440 \$0 \$0 \$1440 08/13/2008

EXAMINER	ART UNIT	CLASS-SUBCLASS
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RAMPURIA, SHARAD K 2617 455-450000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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09/658,731	09/11/2000	Petri Jolma	854.0022.U1(US)	4528
29683	7590	05/13/2008	EXAMINER	
HARRINGTON & SMITH, PC 4 RESEARCH DRIVE SHELTON, CT 06484-6212			RAMPURIA, SHARAD K	
			ART UNIT	PAPER NUMBER
			2617	
DATE MAILED: 05/13/2008				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 59 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 59 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability**

Application No.

09/658,731

Examiner

Sharad Rampuria

Applicant(s)

JOLMA ET AL.

Art Unit

2617

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/31/2008.
2. ☒ The allowed claim(s) is/are Claims 1-2, 4-9 and 11-22 (renumbered as 1-20 respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date ____     | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other ____.   |

**DETAILED ACTION**

***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance:

Claims 3 and 10 are cancelled.

Claims 1-2, 4-9 and 11-22 (renumbered as 1-20 respectively) are patentable.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The closest prior art, Iseyama; Takayuki (US 5787346 A) teaches In a radio channel assignment method in a mobile telecommunication system having a plurality of radio base stations and a base station control unit for controlling each of the radio base stations, the base station control unit assigns a radio channel to a mobile station when radio communication is performed, and each radio base station has frequencies shared as radio frequencies with the other radio base stations. When the mobile station, which is communicating using a predetermined radio channel from among a plurality of radio channels in which a shared frequency is employed as radio frequency, moves into an area of another radio base station, the base station control unit confirms status of use of other radio channels than the predetermined radio channel in the shared frequency and assigns to the mobile station a radio channel, which has been in use thus far, as the radio channel in the area of the other radio base station if all of the other radio channels are idle.

(Abstract)

The next prior art, Gubbi; Rajugopal R. (US 6891847A) teaches Transmissions within a communication channel utilized by devices of a computer network that are outside of a device's designated time slot are accommodated through the use of a clear channel assessment time. The

clear channel assessment time takes into account the device's designated transmission time slot within the communication channel with respect to those of other network devices. Thus, the clear channel assessment time may be a time period that is the product of a predetermined clear channel waiting time and a numerical representation of the difference between the device's designated transmission time slot within the communication channel and that of another network device that completed a preceding transmission. The clear channel waiting time may be specified by a network master device as part of a network connection process and the transmissions within the channel outside of a device's designated time slot may be accommodated after all regularly scheduled transmissions within the channel during a network frame period have been completed. (Abstract)

The closest prior art, Haartsen; Jacobus C. (US 5491837A1) teaches A method and system for the adaptive allocation of channels within a radio communication system, specifically a cellular network, is presented. The allocation method takes advantage of measurements made by the mobile radiotelephone and allocates channels based on the carrier to interference ratio. Using adaptive power control, consideration is given to maintaining an acceptable carrier to interference ratio while at the same time minimizing transmit power. Exemplary embodiments consider independent allocation of the uplink and downlink as well as independent determination of the uplink and downlink power levels. Other exemplary embodiments also give consideration to an efficient method for slot allocation in a TDMA communication system. (Abstract)

The next prior art, Patel; Achal R. (US 6907243A) teaches A method and system for dynamic soft handoff resource allocation in a wireless communications network includes determining a wireless path characteristic individually for each path of a macro diversity

connection between a mobile device and a plurality of wireless sites. Wireless resources are allocated for the macro diversity connection between the mobile device and the wireless sites based on the wireless path characteristic. The wireless path characteristic includes a location-based characteristic, a congestion-based characteristic, a subscriber-based characteristic and/or a performance-based characteristic. (Abstract)

The closest prior art, Gilbert; et al. (US 5999818A1) teaches A method and apparatus for multiplexing time-shared base stations between a plurality of radio communication systems in a cellular communication system. Each radio communication system in the cellular system is assigned a limited unique set of frequencies for communication therein. Base stations in the cellular system are synchronized to a common time base and frequency reuse is achieved by time-sharing the frequencies via allocated time slots. Base stations activated to communicate in a first radio communication system and using the same frequencies that may interfere with each other are activated in the first system only during selected time intervals while same-frequency base stations nearby are deactivated in the first system. The deactivated base stations are then in turn activated in the first system while previously activated same-frequency base stations nearby are deactivated. Enhanced base station efficiency is achieved using the present inventive method by activating the time sharing base stations to communicate in one or more additional radio communication systems during periods when the base stations are deactivated in the first system. The radio communication systems can use differing numbers of assigned frequencies having differing time slot durations. The transmission periods used by each system may be mutually exclusive, or may overlap. (Abstract)

The next prior art, Cuffaro et al. (US 6418317A) teaches The present invention is a method and system for managing frequencies allocated to a cell within a cellular network to assign certain ones of those allocated frequencies for use by channel equipment within that cell. The method measures at least one quality metric for each of the allocated frequencies. At least one measured quality metric for the unassigned frequencies are compared against at least one quality metric for the assigned frequencies. An unassigned frequency is swapped for an assigned frequency based upon the comparison step. Additionally, a voting step is used to indicate that either the unassigned frequency or the assigned frequency has a higher signal quality for communication. (Abstract)

However, all the above combination fails to anticipate or render the claimed limitations in combination with all the recited limitations of the disclosed independent claims obvious (**viewed the entire claim as a whole**), over any of the prior art of record, alone or in combination.

Consequently, the disclosed independent claims are allowed on behalf of above-discussed reasons, and also preserved via Applicants arguments and remarks filed on 03/31/2008 as well. Since the disclosed dependent claims are dependant on one of the above independent claims, therefore they are also patentable.

### ***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue



fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is (571) 272-7870. The examiner can normally be reached on M-F. (8:30-5 EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000 or

[EBC@uspto.gov](mailto:EBC@uspto.gov).

/Sharad Rampuria/  
Primary Examiner  
Art Unit 2617